

## CLAIMS

*What is claimed is:*

- 5     1.     A gaming machine comprising:  
          a gaming machine housing;  
          a master gaming controller adapted for executing a game of chance played on  
the gaming machine and communicating wirelessly with one or more peripheral devices  
used to play the game of chance, wherein the one or more peripheral devices are  
10    mounted within the gaming machine housing; and  
          a wireless communication manager executed by the master gaming controller  
adapted for managing wireless communications between (i) the master gaming  
controller and the peripheral devices, (ii) the peripheral devices, or both (i) and (ii).
- 15    2.     The gaming machine of claim 1, wherein the wireless communication manager  
is adapted to configure a peripheral controller associated with one of the one or more  
peripheral devices to communicate wirelessly with the master gaming controller,  
another peripheral device, or both the master gaming controller and the other peripheral  
device.
- 20    3.     The gaming machine of claim 2, wherein the wireless communication manager  
is adapted to configure the peripheral controller by assigning a communication  
identification key to the peripheral device associated with the peripheral controller.
- 25    4.     The gaming machine of claim 3, wherein assigning a communication  
identification key includes assigning a global unique identifier to the peripheral device,  
wherein the global unique identifier is used to wirelessly communicate to and from the  
peripheral device.
- 30    5.     The gaming machine of claim 3, wherein assigning a communication  
identification key includes assigning a frequency range to the peripheral device,  
wherein the frequency range is used to wirelessly communicate to and from the  
peripheral device.

6. The gaming machine of claim 3, wherein assigning a communication identification key includes providing a frequency hopping algorithm to the peripheral device, wherein the frequency hopping algorithm temporally assigns different frequency ranges within which to communicate to and from the peripheral device.

7. The gaming machine of claim 3, wherein assigning a communication identification key includes assigning a formatting protocol to the peripheral device, wherein different formatting protocols are assigned to different devices within the gaming machine, and wherein the formatting protocol allows the peripheral device to filter out wireless communications intended for other devices.

8. The gaming machine of claim 3, wherein assigning a communication identification key includes providing a spread spectrum to the peripheral device, wherein the spread spectrum provides information allowing the peripheral device to reassemble packets received from the master gaming controller or another peripheral device, packetize communications to send to the master gaming controller or another peripheral device, or combinations thereof.

9. The gaming machine of claim 1, further comprising an internal network manager adapted for managing an internal wireless network implemented in the gaming machine.

10. The gaming machine of claim 9, wherein managing the internal wireless network includes counting a number of packets lost to determine a reliability rate.

11. The gaming machine of claim 10, wherein the number of packets lost includes packets for which no acknowledgement was received, packets that were corrupted, or a combination thereof.

12. The gaming machine of claim 10, wherein managing further includes adjusting the internal wireless network if the reliability rate exceeds a desired level.

13. The gaming machine of claim 9, wherein managing the internal wireless network includes monitoring different frequency channels.

5 14. The gaming machine of claim 1, wherein at least one of the one or more peripheral devices includes a programmable interface, wherein the programmable interface allows interchangeability of the peripheral device within the gaming machine.

10 15. The gaming machine of claim 1, wherein wireless communications between the master gaming controller and peripheral devices and between peripheral devices are confined within the gaming machine housing.

16. The gaming machine of claim 15, wherein wireless communications within the gaming machine are transmitted with a limited strength, range, or a combination thereof, in order to reduce cross-communication with devices external to the gaming machine.

17. A method of providing wireless communications between devices in a gaming machine comprising:  
20 composing and encrypting a message from a first gaming device to a second gaming device, wherein the first gaming device and second gaming device are associated with the gaming machine, and wherein a first communication identification key associated with the first gaming device is used to provide sender information and a second communication key associated with the second gaming device is used to provide  
25 receiver information;

wirelessly sending the message from the first gaming device to the second gaming device using the first identification key and the second identification key; and  
determining at the first gaming device whether the message was received by the second gaming device.

30 18. The method of claim 17, wherein the first gaming device is a peripheral device and the second gaming device is a master gaming controller.

19. The method of claim 18, wherein the message includes information about an activity involving the peripheral device, and wherein the information is stored to a non-volatile memory within the peripheral device.
- 5
20. The method of claim 19, wherein the information stored to the non-volatile memory within the peripheral device is removed from the non-volatile memory after the message is received by the master gaming controller.
- 10
21. The method of claim 17, wherein the first gaming device is a first peripheral device and the second gaming device is a second peripheral device.
22. The method of claim 17, wherein the first gaming device is a master gaming controller and the second gaming device is a peripheral device.
- 15
23. The method of claim 17, further comprising packetizing the message into packets before sending the message, and wherein sending the message includes sending the packets.
- 20
24. The method of claim 17, wherein determining at the first gaming device whether the message was received by the second gaming device includes determining whether the first gaming device has received an acknowledgement from the second gaming device, wherein the acknowledgement is sent by the second gaming device in response to receiving the message from the first gaming device.
- 25
25. The method of claim 17, wherein the first communication key is a global unique identifier associated with the first gaming device.
26. The method of claim 17, wherein the first communication key is a frequency
- 30 range assigned to the first gaming device.

27. The method of claim 17, wherein the first communication key is dynamically assigned according a frequency hopping algorithm to the first gaming device.
28. The method of claim 17, wherein the first communication key is a formatting  
5 protocol unique to the first gaming device.
29. The method of claim 17, wherein the first communication key is a spread spectrum that provides information allowing the first gaming device to packetize the message such that the second gaming device can reassemble the message.  
10
30. The method of claim 17, wherein sending the message includes sending the message as a broadcast having limited strength, limited range, or a combination thereof.
31. The method of claim 17, further comprising resending the message if it is not  
15 determined by the first gaming device that the message was received by the second gaming device.
32. The method of claim 18, further comprising, prior to composing and encrypting the message:  
20       executing self-diagnostics at the peripheral device to confirm that the peripheral device is operating properly;  
          establishing communications between the peripheral device and the master gaming controller; and  
          configuring the peripheral device to communicate wirelessly with the master  
25 gaming controller.
33. The method of claim 32, further comprising:  
          loading configuration and state information associated with the peripheral  
          device from non-volatile memory.  
30
34. A method of receiving wireless communications between devices in a gaming machine comprising:

wirelessly receiving packets from a first gaming device at a second gaming device, wherein the first gaming device and second gaming device are associated with the gaming machine, the packets having a first communication identification key associated with the first gaming device;

5            wirelessly sending confirmation packets to the first gaming device;

             authenticating the received packets from the first gaming device using the first communication identification key;

             assembling authenticated packets into a message from the first gaming device;  
and

10           processing the message at the second gaming device.

35.        The method of claim 34, wherein the first gaming device is a peripheral device and the second gaming device is a master gaming controller.

15        36.        The method of claim 35, wherein the message includes information about an activity involving the peripheral device, and wherein the information is stored to a non-volatile memory within the peripheral device.

20        37.        The method of claim 36, wherein the information stored to the non-volatile memory within the peripheral device is removed from the non-volatile memory after the message is received by the master gaming controller.

25        38.        The method of claim 34, wherein the first gaming device is a first peripheral device and the second gaming device is a second peripheral device.

39.        The method of claim 34, wherein the first gaming device is a master gaming controller and the second gaming device is a peripheral device.

30        40.        The method of claim 34, further comprising verifying the contents of the message.